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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/898,347	07/02/2001	Tao Chen	010401	2438

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Qualcomm Incorporated
Patents Department
5775 Morehouse Drive
San Diego, CA 92121-1714

EXAMINER

LAMARRE, GUY J

ART UNIT	PAPER NUMBER
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2133

DATE MAILED: 12/30/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/898,347

Applicant(s)

CHEN ET AL.

Examiner

Guy J. Lamarre, P.E.

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

1. This office action is in response to Applicants' **Amendment** of 16 October 2003.
- 1.1 Claims 1-18 remain pending.
- 1.2 The art rejections of record are maintained in response to Applicants' amendment of 16 October 2003.

Response to Arguments

2. Applicants' arguments of 16 October 2003 are persuasive only to the extent that the memory means for storing a predetermined number and the retransmission means based on number of times of a frame re-transmission request is received are not specifically described in detail by GONNO. Said memory and retransmission means are clarified as follows.

Examiner notes that those of ordinary skill in ARQ design will recognize that an abort feature is required for terminating retransmissions. Said abort feature is based on a preset maximum number of times for retransmission requests because it is known that at times the transfer medium is so noisy that data transmission must stop, and alternative corrective action must be taken. Therefore, the criterion of basing frame re-transmissions on a predetermined number stored in memory and keeping track of a cumulative number of times frames are received in error, as claimed, is a design requirement for ARQ system design.

Examiner further notes that the prior art does not have to explicitly disclose what is well known, but rather what is essential for enablement. Therefore, Examiner maintains it is not required that **Gonno** teach **textually** what Applicants believe as not being taught or unclear in paras. 2-3 of Applicants' response of page 2. What is required is equivalent functionality, and Examiner maintains that such is provided by **Gonno**.

REMARKS

- 2.1 In response to claims 2 and 11, Applicants allege, on page 3, that such claims were

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rejected as 'lacking novelty under PCT article 33(2).' A review of the last office action could not confirm such allegation.

Claim Rejections - 35 USC ' 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States..

3.1 **Claims 1-18** are rejected under 35 U.S.C. 102 (b) as being anticipated by GONNO (EP Patent No. 000876023; 4 NOV. 1998).

As per **Claims 1 and 10**, Gonno discloses an equivalent means for providing frame re-transmission in a broadcast communication system, comprising: a receiver (col. 4 line 9 and col. 5 lines 9-10) for receiving a message indicative of a frame received in error by a wireless communication device, said message including an identification of said frame; a memory (col. 4 line 27; *(e.g., if an error is detected at the receiver, a NAK or repeat request is issued therefrom to the transmitter so that the frame marked as errored is to be retransmitted, said receiver/transmitter having storage means to hold/process such request.)*) for storing a predetermined number for determining when to re-transmit said frame; and a processor (col. 4 line 11) for determining a cumulative number of times that said frame was received in error and for ordering a re-transmission of said frame if said cumulative number of times is greater than said predetermined number *(e.g., if predetermined number is zero, there is no frame retransmission, otherwise, the frame is retransmitted).*

As per **Claims 2 and 11**, Gonno discloses an equivalent means wherein: said message further comprises a wireless communication device identification (col. 4 line 9 and col. 5 lines 9-10 *or means to identify messages emanating from one or plural receivers*); said memory

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(col. 4 line 27) is further for storing said wireless communication device identification; said processor is further for determining a cumulative number of times that said frame was received in error, said cumulative number increased each time that said frame is identified by subsequent messages from other wireless communication devices.

As per Claims 3 and 13, Gonno discloses an equivalent means wherein said message comprises a negative acknowledgement message (NAK) (col. 4 line 35 and col. 5 lines 15-17, col. 6 line 52).

As per Claim 4, Gonno discloses an equivalent means wherein said identification comprises a frame number (col. 4 line 9 and col. 5 lines 9-10).

As per Claim 5, Gonno discloses, in col. 4 line 11 and col. 12 line 52, an equivalent means wherein said predetermined number comprises a fixed number.

As per Claim 6, Gonno discloses, in col. 4 line 11, an equivalent means wherein, said predetermined number comprises a variable number.

As per Claims 7, 12 and 14, Gonno discloses, in col. 11 line 1, an equivalent means wherein said predetermined number varies in accordance with a latency associated with transmitting new data frames to said wireless communication device.

As per Claims 8, 15, 16 and 18, Gonno discloses, in col. 11 lines 1 and 11, an equivalent means further comprising a transmit buffer, wherein said latency is determined by counting the number of data frames waiting to be transmitted in said transmit buffer.

As per Claims 9 and 17, Gonno discloses, in col. 11 line 25 et seq., an equivalent means wherein said predetermined number varies in accordance with the number of wireless communication devices currently receiving a broadcast transmission.

3.2 To anticipate under section 102, a prior art reference must disclose all the elements of the claimed invention or their equivalents functioning in essentially the same way. The inquiry as to whether a

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reference anticipates a claim must focus on what subject matter is encompassed by the claim and what subject matter is described by the reference. As set forth by the court in *Kalman v. Kimberly-Clark Corp.* 713 F.2d 760, 218 USPQ 781, 789 (Fed. Cir. 1983), cert. denied, 465 U.S. 1026 (1984) it is only necessary for the claims to "read on" something disclosed in the reference, i.e., all limitations in the claim are found in the reference, or 'fully met' by it." The Examiner respectfully submits that all the limitations of Claims 1-18, or their equivalents functioning in essentially the same way, are found in the *Gonno* reference.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

4.1 Any response to this action should be mailed to:

Commissioner of Patents and Trademarks, Washington, D.C. 20231

or faxed to:


(703) 872-9306 for formal communications.

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Fourth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Guy J. Lamarre, P.E., whose telephone number is (703) 305-0755. The examiner can normally be reached on Monday to Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert De Cady, can be reached on (703) 305-9595.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.


Guy J. Lamarre, P.E.
Patent Examiner
12/29/03
